



SUBJECT: Science, Social Studies, Government, English/Language Arts, Health, Physical Education, Consumerism

GRADES: 6-8

DURATION: One class period of 40-60 minutes

GROUP SIZE: One class of 25-35 students

SETTING: Indoors

KEY VOCABULARY: Headline, fact, opinion, editorial,

speleothem

ANTICIPATORY SET: Headlines are written to catch the reader's attention and to develop an interest in the article it is describing. Today we are going to review several articles and their headlines to determine what is fact and what is opinion!

OBJECTIVES: The students will be able to: 1) review several newspaper articles and determine whether information is based on fact or opinion; 2) write a statement in defense of or against a view using information given in the articles; 3) develop an editorial based on the articles read in this lesson.

MATERIALS: Copies of three newspaper articles and one editorial for each group, Fact or Opinion Activity Sheet, For or Against Cards, pen or pencil.

BACKGROUND: Newspapers are excellent teaching tools. They often provide information on real life situations leading to interesting discussions in the classroom. For this lesson we have selected four articles from spring and early summer of 1996 that relate to the break-in and damage of speleothems in Floyd Collins' Crystal Cave. (Speleothem is the collective term for all cave formations-stalactites, stalagmites, gypsum, etc.) Crystal Cave is one of many caves in Mammoth Cave National Park that is no longer used for commercial cave tours. It is located several miles from any of the main roads. In 1996, three vandals broke into the cave on several occasions removing hundreds of pounds of speleothems, rocks, and a few artifacts. This was a serious federal offense. The men were arrested and tried in federal court where they pled guilty. This break-in encouraged local authorities to up-hold a 1988 Kentucky law stating it was illegal to sell cave formations. This case focused on many local rock shops and influenced the way they continue to conduct business.

Readers expect newspaper reporters to give the facts needed to understand the events taking place around them. Facts answer the questions: who, what, when, where, why and how. Opinions are based on and involve our emotions. Opinions can include words such as good or bad, may include complaints or praise, or may focus on the way we feel about a situation, person, event or word. Opinions may be based on a fact, but opinions add more than the information concerning who, what, when, where, why, or how the situation unfolded. Facts are expected in newspaper articles and opinions are often expressed in editorials and/or commentary columns. Is this always true?

With the articles included in this lesson, it is hoped that students will be able to distinguish between what is a factual statement and what is opinion. Because these articles are dealing with natural resources that are irreplaceable and difficult to price in dollar amounts, they tend to include information from both realms.

PROCEDURE:

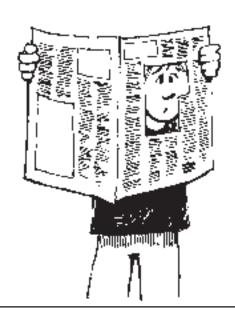
- The students are divided into groups of three. The teacher gives each student a copy of the Fact or Opinion Activity Sheet and gives each group one set of the three newspaper articles. The teacher instructs each student within the group to read one of the articles and complete the first part of their activity sheet.
- 2. Students summarize and discuss each article within their group.
- The teacher cuts the "For" and "Against" cards apart (cards are included in the lesson) and places them in a small container, making certain there is at least one card for each student.
- 4. The teacher has each student select a card from the container. If the student draws a "For" card he/she will write a statement supporting the sale of cave formations in local rock shops. If they draw an "Against" card they will write a statement in support of banning the sale of cave formations in local rock shops. Students should use information from the articles to support their assigned viewpoint.
- 5. Class members can share their statements if they choose to do so. The teacher asks the students to find a classmate with the opposite opinion. These two students then compare their statements. Is the statement they wrote a fact or an opinion? Is their statement based on facts or opinions?
- 6. The teacher may ask the students to think, but not voice, a response to the following questions: Do you agree with the card you drew? Did that make it harder or easier for you to compose your statement? If you were a lawyer and it was your assignment to take this to court, could you defend your position or would you turn down the case?
- 7. The teacher passes out copies of the editorial. The students read the entry. Does this article have any common themes with the earlier articles? What are they? The class lists the common themes on the board. The teacher asks the students to finish their activity sheet by writing an editorial using the title, "Placing a Price on Our Nation's Natural Resources." Do they agree that someone can place a value on air, water, rocks, plants and animals? Why or why not?
- 8. The students are invited to share their editorials.

CLOSURE: What often makes news is an event that provokes the feeling of being either for or against a situation. Because we have the ability to feel and think, opinions often mix with fact in many news events. This causes us to become involved in the issue. As a good reporter our goal is to be as objective as possible concerning the information we are reporting. Editorials are a different story. The writer of an editorial will purposely draw in people's emotions to sway their opinion.

EVALUATION: The teacher is able to evaluate the students by reviewing activity sheets, class discussion, and student editorials.

EXTENSIONS:

- As a follow-up activity the students could write an editorial on a topic affecting their school at the current time. This topic might also be a resource-related issue.
- Have the students watch a half-hour news program and record the number of facts and opinions stated in a ten minute period. For the remainder of the broadcast the students could note how many of the stories were presented to get people emotionally or intellectually involved.
- 3. The students could research how another environmental issue is reported in a newspaper or magazine. They could answer the same questions about these articles as they did for the cave articles.



FACT OR OPINION ACTIVITY SHEET

1. Statement:

- a. Using the information found in your article, write a statement expressing your point of view. (Use a separate piece of paper or the back of this page if necessary.)
- b. Identify the statements from your article and label them as either "fact" or "opinion".

2. Write an editorial:

Write an editorial using the title, Placing a Price on Our Nation's Natural Resources. (Use a separate piece of paper or the back of this page if necessary.)

"FOR" OR "AGAINST" CARDS

FOR

AGAINST

FOR

AGAINST

FOR

AGAINST

FOR

AGAINST

FOR

AGAINST

ARTICLES

THE COURIER-JOURNAL . . SUNDAY, NOVEMBER 30, 1997

EDITORIALS

"It's not a question of plants and rocks

matter of preserving

the experience that

draws people ... in

being more

important than

the first place."

people. It's a

Getting serious

WO FEDERAL decisions last week can be counted as breakthroughs in the effort . to preserve our natural heritage.

One, announced by Interior Secretary Bruce Babbitt, will ban most cars from Yosemite, Zion, and Grand Canyon national parks, where visitors will be brought to the natural wonders by bus and/or light rail.

The other, made by the Feder-

al Energy Regulatory Com-mission, will mission, will force the removal of a private, 160-yearold hydroelectric dam, so that striped bass; sturgeon, Atlantic salmon and herring can spawn in a 17mile stretch of Maine's Kennebec River.

The Clinton Administration is on the right track. The compromise of America's most cherished places by processions of fume-belching autos, pick-ups and RVs can't be tolerated forever. And the private appropriof public ation streams shouldn't be treated as a permanent right.

The public's attitude in such matters is easy to predict. Few will complain about the elimination of car exhaust from our most sensitive parklands. And while Edwards Manufacturing Co: will challenge the dam decision in court, New England's environmentalists are elated. They've wanted the thing torn

down for years. Both decisions have broader implications.

In the next 15 years, the energy commission will be able to reconsider the licensing of 550 dams across the country. Naturally, the private interests will bray, as they always do, about the government's "taking" of as-sets. And, given our tradition of placing property rights before community concerns, it's likely that some of them will be entitled to relief. In the meantime, though, it's good to see the public win one for a change, up there in Maine.

The prospect is even better for progress against overcrowding, vandalism, polluted air and dirty water in the 367 units of

our national park system.

Higher en-try fees and new user charges. which we have cautiously en-dorsed, are not enough, as the Clinton Administration is tacitly acknowledging. Nothing short of an outright auto

ban will prevent the most popu-

lar parks from suffocating. It's not a question of plants and rocks being more important than people. It's a matter of preserving the experience that draws people to the parks in the first place.

Each site is unique. More than 15 million come to Golden Gate National Recreation Area each year, to see the spectacular Pacific headlands that are within sight of downtown San Francisco. The challenge there is somewhat different from the one that park officials confront at Big Cypress swamp in Florida, which only a couple of hundred thousand visitors manage to find every year.

There is no one solution. But all of these public assets must be managed pro-actively, and wisely.

For Kentuckians and Hoosiers, the issue is not just the fate of places like Mammoth Cave and the Indiana Dunes. All of the nation's parks belong to all of us.

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HEADLINES MAKING

ARTICLES

MARCH 1, 1996 theff spree

FRIDAY.

THE COURIER-JOURNAL

By CYNTHIA EAGLES Staff Writer

PARK, Ky. - The damage to the sheets of gypsum torn away, powof Floyd Collins is extensive: Entire cave that was once the resting place their roots and missing. dery piles of crushed gypsum crysals on the cave floor, and delicate, acy helictites snapped clean from And on an outer wall, in bold MAMMOTH CAVE NATIONAL

Yesterday, Wendell Leon Reynolds, 18, of Munfordville, Anthony Wayne Hawkins, 33, of Radcliff, and Anthony Dale Stinson, 23, also of Munfordville, pleaded guilty to federtions from it last spring. Reynolds and Hawkins now face Park when they stole cave formaal charges that they destroyed Crysal Cave at Mammoth Cave National

maximum sentences of 35 years in afederal prison, plus fines of \$750,000 each. In addition, Stinson admitted that he stole two day total of 45 years in prison, plus a \$1 masks of Collins and his brother, Homer. He could be sentenced to a

Sentencing was set for May 22.
The three admitted to U.S. District
Judge Thomas B. Russell that from April to June they made repeated trips "in the dead of night," as the indictments charge, tunneled under an entrance gate and hauled out 800 pounds of "cave rocks" in duffel ags. Baseball bats were their tools

white paint, two names sprayed in a corner: "Leon R." and "Tony H." Edmonsor NATIONAL PARI County MAMMOTH CAVE County (65 Hart CRYSTAL SP HORSE Barren County

STAFF MAP BY STEVE DURBIN

"We put the rocks inside duffel bags and carried them out," Stinson said in court. told the judge yesterday. "Some of them we broke, and some of them were loose," Reynolds

In stealing the formations, the vandals dragged the heavy rocks up and
down steep cave paths, then got out
by squeezingthrough a muddy hole
no more than a foot wide and about
two feet deep to get out. Then they
lugged the heavy bags another mile
to their vehicles.

Crystal Cave "is trashed for etermi-ty," said Randy Ream, the assistant U.S. attorney who prosecuted the

ity to law enforcement.

ed they damaged roughly a mile in one passage, and ruined a quarteralong some passages, and took whole sections of the lacy formations yesterday revealed that the vandals pulled away entire sheets of gypsum along some passages, and took mile of another. A tour for reporters known as helictites. The National Park Service estimat

ernment. gravity and logic. Damage to the cave was put at \$270,000 by the gov-Related to stalactites and stalag-mites, the familiar cave "icicles," helictites grow in curlicues that defy

cache to rock and souvenir dealers that line the entrance roads to the park. For all their efforts, they got \$1,000 or less, Ream said. Ream said the trio peddled their

mations came from the park. the booty but did not arrest the shop that the shop owners knew the for owners. Ream said he couldn't prove Federal investigators confiscated

better gate at the cave, and the Mam-moth Cave area rock shops, for ig-noring a 1988 state law that bars the sale of "speleotherms," as cave formations are formally known. the rocks, and has been a low priorthat it's only a misdemeanor to sel ter, who criticized the National Park Conservation Association, David Fostive director of the American Cave Service for being slow to install a However, Foster acknowledged The vandalism enraged the execu-

See THREE Page 3, col. 4, this section

cave damage Three admit

Continued from Page B 1

protection of Crystal Cave was ech-oed by Carol Collins, whose husband His criticism of the park service's

neighbors. Vickie Carson, a National Park entrances, and also relies on tips from patrols and surveillance to watch cave gate-building program under way. She also said the park service runs that the park service has a new cave Service spokeswoman, responded

Cave became known as Floyd Collins is now known as Sand Cave. Crystal the national park service bought it. lins became trapped and died in what be closer to the main highway entrance to Crystal Cave that would Crystal Cave, It closed in 1961 when thus lure more tourists -In 1925, while trying to find a new rway - and Floyd Col-

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ARTICIFS

Stemming thefts of Kentucky cave treasures



STATE PROTOS DY MICHAEL PLAYMAN

Rick Claon, a Mammoth Cave National Park ranger, examined cave formations that were thought to have been damaged by thieves in Floyd Collins' Crystal Cave.

Rock formations became easy souvenirs despite law

By ANDREW MELNYKOVYCH Staff Writer

MAMMOTH CAVE NATIONAL PARK, Ry. — Stealing helicities, bisarre rock formations that look like petrafiee pasts, from Fleyd Collin' Crystal Cave is no simple task.

It requires walking a mile down a gravel road in Mammoth Cave National Park, descending a flight of steep and slippery stone stairs, tunneling under a steel gate and then venturing nearly a mile into the cave said, going up and down underground hill and dale.

Then there's the business of using

Then there's the business of using hammers, hatchets and bare hands to break the formations into manageable pieces. And finally, the return trip --

this time hashing out the heavy loads.
Why would arryone go to all that trouble?

trouble?

For money. The thieves have been vandalizing itemacity's subterranean heritage and selling the staten pieces in rock shops on the read from Cave City to the national park.

That is where three men who received federal prison terms last ments for ransacking Floyd Collins' Count Cours for the rate between the control of the co

Crystal Cave found ready buyers for the helicities and other formations they stole - formations that took mil-



This confiscated cave rock was for sale in a souvenir shop.

lions of years to create and only sec-onds to destroy.
"If there weren't a market, there wouldn't be any traffic in it," said Mansrooth Cave National Park Super-

tendent Ron Switzer. Selling case formations has been il-

legal in Kentucky since 1988. But the open trade in case formations west unchecked until the past two weeks. when the Kentucky State Police opened an investigation. One rock-

opened an investigation. One rock-shop owner has been charged with violating state law.
"This all could have been invoided completely if the law had been upheld from the very beginning." Carol Col-lins said. She is married to a nephow of farned case explorer Floyd Collins, who developed the cave that hears his name.

The destruction in Floyd Collins' Crystal Cave has focused attention on a long-standing problem in Ken-tucky's cave country. Visitors have been removing formations from caves and leaving graffiti behind for nearly two centuries. Only in the post 40 or 50 years has that conduct been con-sidered vendalism.

Nevertheless, the destruction of cases curtimues. Those that are nei-ther protected within Mammoth Case National Park nor operated as pri-vately run tourist attractions bear the beant of the abuse, said Dave Fuster, executive director of the American Cave Conservation Association

> See THIEVES Page 5, col 3, this section

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ARTICLES

Thieves stole cave treasures

Continued from Page B 1

Many have been looted for their formations, but "a lot of the vendalism is just that," Foster said. "There's a lock of awareness that these are irreplaceable resources."

Foster's group, which operates a cave museum in Horse Cave and offers tours of Hidden River Cave, and the national park are trying to get out the message that caves are fragile places deserving protection.

That will require changing the attitude of many local residents who believe caves are an economic resource, rather than a natural one, Switzer said.

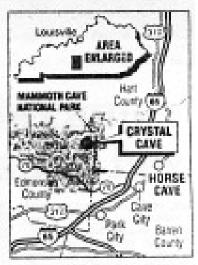
Cases within Mammoth Cave have been vandalized before. There were several highly publicized cases in the 1970s when workers at a since-closed Job Carps camp in the park entered Floyd Collins' Crystal Cave through another entrance.

But the situation is far worse in the many unprotected cases on private land, Switzer said. "I don't have any hope of protecting all the case resources in this region," he said. "We're going to do what we can within the boundaries of the park to protect a representative sample."

But park officials have come under fire for not doing enough. Foster and Collins said security has been a problem at Floyd Collins' Crystal Cave since 1961, when the National Park Service bought it from the family that purchased it from the Collins family in the 1928s.

"It's hard to get any case completely secure." Collins said. "But I think they could have done better."

Park rangers routinely patrol only the main roads and sarely venture beyond the locked gate where the gravel road to Floyd Collins' Crystal Cave begins. The vandals were able to make at least six trips to the cave before their work was discovered.



STAFF HAR BY WES KENDALL

During one of those visits, a park ranger saw their car parked at the gate. He noted the license number but did not investigate further.

Finding a parked car was not unusual. Switzer said, defending the ranger. The ranger was akine on duty that night and had nobody to call for backup in the event of trouble.

Switzer said that points out the impact of budget cutbacks on the national parks. To Foster, the message is the park tim't putting people into the jobs where they are most needed. But park officials and case conser-

But park officials and cave conservationists hope some good comes of the destruction of Floyd Collina' Crystal Cave, including stricter laws against the sale of cave formations, better enforcement of existing laws, and a heightened awareness of the meet to protect Kentucky's caves.

"We can't put the damaged formations back together again." Faster said. "But we can take this as a wakeup call and make sure it doesn't happen again."

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ARTICIFS

Cave-rock crackdown ends inaction

By ANDREW MELNYKOVYCH Soulf Writer

CAVE CITY. Ky. — Early 1 ust month, anybody could walk into Big Mike's or Debbie's — two rock shops near Mammoth Case National Park and choose from a selection of cave formations, sold openly in violation of

Last week, after a visit by the Kensucky State Police, there was not a stalactite, stalagmite or helicite to be found in either shop.

But cave conservationists aren't praising the crackdown. They're ask-

ing. "Vhat took so long."

Barren County Attorney Ben Rog-ers, whose job includes prosecuting violators of the state law, says the answer is simple: Nobody ever com-plained about the illegal sales. "If it was such an obvious problem, it makes me wonder why nobody had ever filed a complaint.

David Foster, executive director of the American Cave Conservation Association, headquartered in Horse Cave said, "Most people think if it's illegal, the police and presecutors ought to be taking care of it." National park officials and cave

conservationists say the open trade in cave rocks — and failure to enforce the 1988 state law making it a misdemeanor — were driving forces behind list year's looting of Floyd Collins' Crystal Cave. Formations taken from the cave were sold to both Big Mike's and Debbie's and later were confiscated as evidence in the federal case against the three looters.

The rock shops were not charged in the case because federal prosecutors did not believe they could prove the owners knowingly bought formations taken from the national park.

On May 12, a reporter was able to buy specimens at both shops, and sales clerks unbesitatingly identified the items as case formations. They later were confirmed as such by a federal geologist.

One seller of cave formations pleaded ignorance of the law. "I just found out ... when the state police came out and investigated ma,"



STAFF PHOTO BY MICHAEL HAYMAN

This souvenir shop in Cave City advertises "cave rock" for sale but had none last week after a Kentucky State Police creckdown.

"Rig Mike" Fontana said Wednesday.
"We're not criminals trying to do something illegal."

Fontana has taken down signs advertising "cave rocks" and said,
"We're not going to sell them no
more." He said the rocks bought by a reporter came from Mexico 15 years

Fontana denied buying rocks from local caves, and he said none of the rocks taken from Floyd Collins' Crystal Cave was recovered from his shop.

Sworn testimony in the case indicates that the looters sold two batches of fermations to Fentana's shop-and Assistant U.S. Attorney Randy Ream said two boxes of rodes from the cave were recovered from Big

Debbie Passmore, who owns Debbie's with her husband, David, would not talk about it last week. David Passmore was changed after a state police dets tive found 143 cave specimens in the shop May 23.

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CORE CONTENT

PL-M-1.1.3 Communication, cooperation, rules, and respect are important to the effective functioning of groups. PL-M-2.3.2 Rules of behavior and fair play (e.g., accepting authoritative decisions, assessing one's own performance level, accepting skills and abilities of others through verbal and nonverbal actions for spectators and/or participants) during games are necessary. PL-M-3.3.2 Improving environmental conditions (e.g., air and water quality) and preserving natural resources impact personal and community health. RD-H-x.0.7 Formulate opinions in response to a reading passage. **RD-H-x.0.6** Paraphrase important parts of a passage. RD-H-x.0.1 Locate, evaluate, and apply information for a realistic purpose. RD-H-4.0.8 Identify essential information needed to accomplish a task. RD-H-2.0.13 Analyze the content as it applies to students' lives and/or real world issues. RD-M-x.0.10 Connect information from a passage to students' lives and/or real world issues. RD-M-x.0.9 Reflect on and evaluate what is read. RD-M-x.0.8 Make predictions, draw conclusions, and make generalizations about what is read. RD-M-x.0.7 Skim to get the general meaning of a passage. RD-M-x.0.6 Scan to find key information. RD-M-x.0.1 Identify an author's purpose in literary, informational, persuasive, and practical/workplace materials. RD-M-4.0.11 Locate and apply information for a specific purpose (e.g., following directions, completing a task). RD-M-3.0.17 Identify bias and/or misinformation. RD-M-3.0.15 Identify the argument and supporting evidence. RD-M-3.0.14 Distinguish between fact and opinion. RD-M-3.0.13 Apply knowledge of organizational patterns (e.g., cause and effect, comparison, contrast, sequence) to understand a passage. RD-M-3.0.12 Identify an author's opinion about a subject. RD-M-2.0.13 Identify supporting details and explain their importance in a passage. RD-M-2.0.12 Apply knowledge of organizational patterns (e.g., cause and effect, comparison, contrast, sequence) to understand a passage. SS-M-4.4.3 The natural resources of a place or region impact its political, social, and economic development. WR-M-1.4 Transactive writing is informative/persuasive writing that presents ideas and information for authentic audiences to accomplish realistic purposes like those students will encounter in their lives. In transactive writing, students will write in a variety of forms.